IEIP Brief

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An Update on Activities at the International Emerging Infections Program, Thailand

The big news this quarter is the appointment of Dr. Khanchit Limpakarnjanarat as the Adjunct Director of IEIP Thailand. The appointment of a Thai Adjunct Director to share leadership of the program and to strengthen collaborations with the Ministry of Public Health has been a priority since the beginning. Dr. Khanchit comes to IEIP from the HIV/AIDS program, where he served for 1 year as the Chief of Surveillance and for 11 years as the Adjunct Director. During that time he helped guide the growth of the program from 2 to more than 100 staff, with collaborations across the MOPH and in many Universities and organizations around Thailand. He is a recognized leader in epidemiology and HIV/AIDS research, with more than 60 publications and numerous awards, including one of CDC's most prestigious scientific honors, the Charles E. Shepherd award. Dr. Khanchit brings a wealth of scientific and administrative experience to IEIP at a time when rapid growth in staff and projects require it most. – *Scott Dowell*

Outbreak Response

CDC assistance was recently requested during an outbreak of unexplained respiratory illness among health care workers in Hanoi. IEIP assisted Dr. Tim Uyeki, DVRD, acquire supplies while transiting in Bangkok in route to Hanoi to assist with the investigation. In addition, IEIP shipped specimens to Atlanta for laboratory testing to help identify the cause of the outbreak.

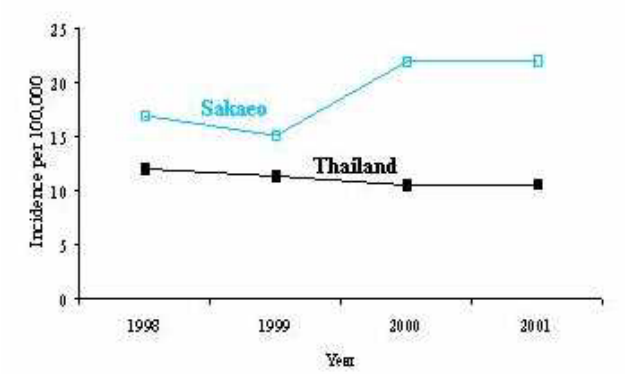
Dr. Khanchit Limpakarnjanarat, IEIP Adjunct Director

Research

The "Etiology and Serologic Diagnosis of Febrile Illness and Discriminators for Leptospirosis" project has completed its first year. The study enrolled 924 patients; 98.5% of whom returned for the convalescent visit. Testing of paired sera at Thai NIH, DVRD, and AFRIMS revealed that 21% had acute dengue, 14% had murine typhus, 10% had spotted fever group rickettsial infection, and 6.2% had leptospirosis. Testing for bartonella and melioidosis are ongoing. The study will continue for a second year at the same sites to further characterize the diseases that contribute to fever in rural Thailand.

Training

Stanford MD/PhD student Ellie Click spent February doing a rotation with IEIP. While in Bangkok, Ellie partnered with Suchada Juntasiriyarkorn in the Surveillance and Investigations Branch of the Bureau of Epidemiology to review national surveillance data for reported hepatitis in preparation for IEIP's active surveillance for jaundice. Of particular interest were the data from Sakaeo province. From 1998 to 2001, the annual incidence of reported hepatitis increased from 16.9 to 22 per 100,000 persons (see figure below). During the same time period, liver and bile duct cancer mortality increased from 10.2 to 29.7 per 100,000. This review, which will be published in the Thai MMWR, raises interesting questions about the etiology and true burden of hepatitis.



Reported incidence of hepatitis, 1998-2001

Surveillance

Active surveillance for radiologically confirmed pneumonia began in Sakaeo province in September 2002. In the first 8 months of data collection, 276 patients met the case definition, of whom 35% were children under 5 years. At admission, 76% were tachypneic, 49% had leukocytosis (WBC>11,000 cells/µl), and 6% had leukopenia (WBC<4,000 cells/µl). The median length of hospital stay was 5 days, 39% received supplemental oxygen, 8% were intubated, and 8% died. Of all suspect pneumonia patients, 56% had a chest x-ray, and 79% of chest x-rays had definite or probable pneumonia according to the radiology panel. The ability to measure the annual incidence of radiographically confirmed pneumonia (143 per 100,000 persons and 639 per 100,000 children under 5) is a unique feature of this surveillance system that will become a valuable public health resource over time.